

Abstract

A device is described for indicating the locking state of a fifth wheel coupling (1) and an arrangement of a first and a second sensor (6, 7).

According to the prior art, the first sensor (6) is arranged on the underside of the locking latch and monitors the position of the kingpin in relation to the locking latch (13). A second sensor (7) that is used is an inductive proximity switch that monitors a safety mechanism against loosening. In practice, this type of positioning of the first sensor (6) has led to damage of the locking latch (13) and the sensor (6), while the signals of the second sensor (7) were often false signals.

Thus, the object of the invention was to provide a device for indicating the locking state, which maximizes operational availability and minimizes false signals. A further object of the invention was to optimize the arrangement of the first and the second sensor (6, 7).

These objects were attained by arranging the first sensor (6) detecting the kingpin (3) in the area of the locating hole (2) and configuring the second sensor (7) as a magnetically sensitive sensor that interacts with a magnet (9) mounted on the operating lever (4). The two sensors (6, 7) are based on different mechanisms of action.

FIG 2